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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/698,440

11/03/2003

Se Kit Yuen

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01/20/2006

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EXAMINER

CONLEY, SEAN EVERETT

ART UNIT

PAPER NUMBER

1744

DATE MAILED: 01/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/698,440

Applicant(s)

YUEN, SE KIT

Examiner

Sean E. Conley

Art Unit

1744

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on November 3, 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 1-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "extreme" in claim 1 is a relative term which renders the claim indefinite. The term "extreme" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Specifically, one of ordinary skill in the art would not understand what an "extreme" ultraviolet ray tube encompasses.

2. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites the limitation "the front and the rear shield wall". There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
3. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yuen et al. (GB 2301179 A) in view of Taylor et al. (U.S. Patent No. 6,911,186 B2).

Yuen et al. discloses an optoelectronic air cleaner comprising a main body (cover (24) with base (22)) of pyramidal shape, the main body including a draft fan (36), a transformer (44), a circuit board (42), an extreme ultraviolet ray tube (32) and a cathode high voltage discharge fiber thread (40) therein, characterized in that the main body is provided with an air inlet (via filter cover (30)) and an air outlet (via outlet grill (14)), the air outlet being disposed on the front end of the main body (see figure 2), an air exhaust gridiron (outlet grill (14)) being disposed in the front surface of a plate fixed on a front gridiron (fan cover (34)) on the front end (16) of the main body; the air inlet (via filter

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cover (30)) being disposed on the rear end of the main body and having an air input gridiron (filter cover (30)) provided with a dustproof gridiron (filter holder (26)), a dust screen (filter (28)) and a dust cover for the air inlet; a draft fan fixing cover (fan cover (34)), a draft fan (36) and a fixing frame (support frame (38)) being provided adjacent to the inner surface of the air exhaust gridiron (14); a carbon fiber thread (40) being fixed to the center of the front surface of the air exhaust gridiron (14); an air collecting device being (empty space between the filter holder and the fan support frame) disposed between the air inlet and the draft fan; and an extreme ultraviolet ray tube (32) being disposed at the center of the air collecting device (see figure 2; page 4, line 8 to page 5, line 27). Yuen et al. fails to specifically teach an air cleaner comprising a main body that is cylindrical in shape.

Taylor et al. discloses an air purification device for removing particles from an air by subjecting an airflow to ultraviolet radiation from a germicidal lamp within the device. The device comprises a housing that is cylindrical in shape (see figures 2A-4; abstract).

Therefore, it would have been an obvious matter of design choice to make the device cylindrical in shape as taught by Taylor et al. as opposed to being pyramidal since the court has held that a claimed shape was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration of the claimed shape was significant (see In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966)).

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4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yuen et al. in view of Taylor et al. as applied to claim 1 above, and further in view of Hak (U.S. Patent No. 6,494,940).

Yuen et al. in view of Taylor et al. teach an air collecting device that is defined by an air collecting wall (wall of filter holder (26) and the fan support frame (38)). However, Yuen et al. in view of Taylor et al. fail to specifically teach an air collecting device that includes a shield wall in order to prevent ultraviolet rays from radiating outside of the device.

Hak discloses a portable air purifier (10) that includes a housing (12) having an ultraviolet chamber (18) for collecting and treating the airflow passing through the device. Within the ultraviolet chamber (18) is an ultraviolet lamp (88) and a wall of chamber (18) includes a shield (102) is supported above the lamp (88) and functions to direct the ultraviolet light away from the outlet grille (106) of the air purifier (10) (see figure 7; col. 4, lines 55-65; col. 6, line 66 to col. 7, line 35).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Yuen et al. in view of Taylor et al. and include a shield in the air collecting device as taught by Hak in order to prevent ultraviolet light from escaping the air purification device where it could harm the device operator.

***Allowable Subject Matter***

5. Claim 3 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

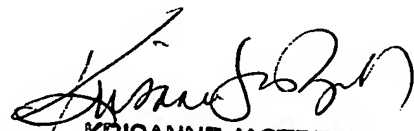
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean E. Conley whose telephone number is 571-272-8414. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rick Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SEC

January 13, 2006

  
KRISANNE JASTRZAB  
PRIMARY EXAMINER